

CCNA Countdown Calendar

The lines after the countdown number allow you to add the actual calendar days for reference.

31

Networking
Models, Devices,
and Components

30

Ethernet
Switching

29

Switch
Configuration
Basics

28

IPv4
Addressing

27

IPv6
Addressing

26

VLAN and
Trunking
Concepts and
Configuration

25

STP

24

EtherChannel
and HSRP

23

DHCP and
DNS

22

Wireless
Concepts

21

WLAN
Configuration

20

LAN Security
and Device
Hardening

19

Basic Routing
Concepts

18

Basic Router
Configuration

17

The Routing
Table

16

Inter-VLAN
Routing

15

Static and
Default Route
Configuration

14

OSPF
Operation

13

Single-Area
OSPF
Implementation

12

Fine-Tuning and
Troubleshooting
OSPF

11

Network
Security
Concepts

10

ACL Concepts

9

ACL
Implementation

8

NAT

7

WAN, VPN, and
IPsec

6

QoS

5

CDP and LLDP

4

Device
Monitoring,
Management,
and Maintenance

3

Cloud,
Virtualization,
and SDN

2

SDA and Cisco
DNA Center

1

Network
Automation

EXAM DAY

Time

Location

Exam Checklist

CCNA Checklist Days 31–21

✓ Objective
Schedule to take the CCNA 200-301 exam at http://www.vue.com .
Take at least one practice CCNA exam.
Create a diagram of the layered models.
Describe the details of sending an email from source to destination. Use a topology with several routers and switches.
Describe the CSMA/CD process to someone who knows nothing about networking.
Design a set of requirements to configure a basic switched network, including SSH for remote access. Implement your design and verify the configurations.
Show someone the MAC address on his or her Smartphone or other connected device. Explain the purpose of the MAC address and the meaning of each part.
Describe the structure and operation of IPv4. List and describe the uses for the various types of IPv4 addresses.
Develop several VLSM addressing schemes with various host requirements and implement them in a lab or simulator.
Describe the structure and operation of IPv6. List and describe the uses for the various types of IPv6 addresses.
Design a set of requirements to configure a two-switch network with VLANs and trunking.
List and describe the uses for various types of VLANs.
Describe how trunking works and the impact of Dynamic Trunking Protocol.
Design a set of requirements to configure a three-switch network with trunking and VLANs. Implement your design and verify the configurations.
Describe the process of STP convergence.
Compare the varieties of STP.
Explain the difference between PVST+ and Rapid PVST+.
Describe the benefits of EtherChannel. Compare the two EtherChannel protocols.
Design a set of requirements to implement a two-switch topology with EtherChannel. Review implementation issues by changing the configuration parameters.
Describe how HSPR provides default gateway redundancy.
Explain to a friend how wireless networks operate.
Practice configuring a wireless router. Use a simulator like Packet Tracer to practice configuring a WLC.
Read and review Days 31–21 in this book.

CCNA Checklist Days 20–14

✓ Objective
Take at least two practice CCNA exams.
Describe the various methods that a router can use to learn about and share knowledge of remote networks.
Design a set of requirements to configure a three-router network with both IPv4 and IPv6 addressing, using only static and default routes. Implement your design and verify the configurations.
Describe how a router uses the routing table to determine the best path to the destination.
Design and configure a one-router, two-switch topology for router-on-a-stick inter-VLAN routing.
Describe the types of OSPF packets and how they are used to reach the full state of OSPF convergence.
Describe the ways to modify OSPFv2, including redistributing a default route, modifying timers, and controlling the DR/BDR election.
Read and review Days 20–14 in this book.

CCNA Checklist Days 13–7

✓ Objective
Take an additional CCNA practice exam.
Design a set of requirements to configure a three-router network with IPv4 addressing and OSPFv2. Implement your design and verify the configurations.
Design a set of requirements to configure a two-router, two-switch network with IPv4 addressing and inter-VLAN routing. Include default routing and OSPFv2. Implement your design and verify the configurations.
Describe basic security threats and the methods used to mitigate them.
Describe how access control lists work and the various types used by Cisco IOS Software.
Search the Internet for various scenarios to practice designing and implementing ACLs. Most of the study resources have excellent examples.
Design a set of requirements to implement a routed network that includes basic device security, IPv4 and IPv6 addressing, VLANs, DHCP, NAT, ACLs, and routing. Implement your design and verify the configurations.
Design a set of requirements to implement DHCP service on a router. Dual-stack the design to include IPv4 and IPv6. Implement your design and verify the configurations.
Design a set of requirements to implement NAT on a router. Include static, dynamic, and PAT considerations. Implement your design and verify the configurations.
Define common WAN terminology.
Compare various WAN connection options.
Describe the characteristics of GRE.
Read and review Days 13–7 in this book.

CCNA Checklist Days 6–1

✓ Objective
Describe to a friend how QoS prioritizes Netflix streaming data over web browsing data.
Compare and contrast the implementations of CDP and LLDP.
Describe the Cisco IOS file system and the process for backing up and restoring files.
Explain the basics of SNMP, NTP, and syslog operation.
Design a set of requirements to implement SNMP, NTP, and syslog in a two-router, one-server topology.
Describe to a friend the concept of cloud computing. Include a discussion of virtualization.
Describe software-defined networking.
Describe the fabric of the network infrastructure and the difference between overlay and underlay.
Describe how Cisco DNA Center helps network administrators automate network configuration and monitoring tasks.
Describe to a friend how data formats are used to store and exchange information between systems.
Describe the JSON data format, including how brackets, braces, and commas are used to distinguish key/value pairs, arrays, and objects.
Describe the structure of a properly formatted RESTful API request.
Compare the configuration management tools Ansible, Puppet, and Chef.
Read and review Days 6–1 in this book.
Visit the testing center and talk with the proctor at least 2 days before the exam.
Eat a decent meal, watch a good movie, and get a good night's rest before the exam.